

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 4, 6, 7 and 11 have been amended and claim 2 has been cancelled. No claims have been added. No new matter has been added by way of the amendments.

Claims 1, 3-7 and 11 are pending and under consideration. Claims 1 and 11 are independent claims. Reconsideration is respectfully requested.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1-2, 5-7 and 11 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over "the applicant's admitted prior art" ("AAPA") in view of U.S. Patent No. 6,577,566 issued to Tomita ("Tomita"). Applicant traverses the rejection for at least the reasons discussed herein and reconsideration is respectfully requested.

Amended independent claim 1 recites at least the following features:

generating a land/groove signal to discern land tracks and groove tracks of the DVD-RAM disc, wherein the land/groove signal is at a first state when the optical pickup is positioned over the land tracks, the land/groove signal is at a second state when the optical pickup is positioned over the groove tracks, the land/groove signal transits from the first state to the second state or from the second state to the first state, and the optical pickup is positioned over either the land tracks or the groove tracks depending on the state of the land/groove signal;

Tomita, taken separately or in combination, fails to suggest or disclose at least the above-recited features of amended independent claim 1.

The current Office Action asserts at page 3 that Tomita describes and illustrates the above-recited features at FIGS. 13 and 14 and col. 24, lines 25-40. Applicants respectfully disagree with this assertion.

FIGS. 13 and 14 of Tomita both illustrate a sinusoidal variation of a tracking error signal as the position of a laser spot (SP) varies. Similarly, the cited portion of Tomita states in its entirety:

When the laser spot SP is shifted from the land Ld toward an inner circumference of the disc, the tracking-error signal TE increases in a plus direction relative to the 0-level target value. When the laser spot SP is shifted from the land Ld toward an outer circumference

of the disc, on the other hand, the tracking-error signal TE increases in a minus direction relative to the 0-level target value.

In order to attain a state of on-track along the land Ld, as an operation of the tracking-servo control circuit, control is executed to converge the tracking-error signal TE to the 0-level target value as follows. If the tracking-error signal TE increases in a plus direction relative to the 0-level target value, the objective lens 220 is driven in a direction toward an outer circumference. If the tracking-error signal TE increases in a minus direction relative to the 0-level target value, on the other hand, the objective lens 220 is driven in a direction toward an inner circumference (col. 24, lines 25-40).

It can be seen that the above-cited text from Tomita, similar to FIGS. 13 and 14, only refers to a tracking error signal and fails to even mention a land/groove signal. However, a tracking error signal is completely different than a land/groove signal. For example, a land/groove signal generally discriminates between lands and grooves, while a tracking error signal compensates for offset due to shifts of the objective lens. Consequently, the cited portions of Tomita do not suggest or disclose all of the above-claimed features.

Amended claim 1 further recites at least the following features:

generating a jump signal in response to a state of the land/groove signal varying;

The Office Action mailed February 22, 2007 sets forth on page 6 the following rationale supporting the rejection, as applied to the above-recited features:

"[A]s is shown in the applicant's admitted prior art upon automatic pausing of the optical pickup the pickup is moved back $\frac{1}{2}$ of a track. Tomita teaches moving the pickup whole tracks using the land/groove signals (see column 27 lines 18 and 19). It would have been obvious to use the land/groove signals of Tomita to move the pickup back $\frac{1}{2}$ of a track as required in the prior art."

Applicant asserts the proposed combination of AAPA and Tomita fails to suggest or disclose at least the above-recited features. For example, the *Description of the Related Art* section of the current application fails to even mention the word jump, let alone suggest or disclose "generating a jump signal in response to a state of the land/groove signal varying." Moreover, previous Office Actions have failed to specifically indicate where the above-recited features are discussed in Applicant's *Description of the Related Art*.

The February 22, 2007 Office Action cites column 27 lines 18 and 19 of Tomita as describing the above-recited features. The cited portion of Tomita states:

Grooves adjacent to the present non-wobbled groove NWG on both sides thereof are wobbled grooves WG. Thus, the jump of 1 track puts the laser spot SP in a state of on-track along a wobbled groove WG.

Applicant respectfully disagrees that the cited text suggests or discloses the above-recited features. The cited text from Tomita simply describes a jump of 1 track, which necessarily puts the laser spot SP in a state of on-track along a wobbled groove since the present track is surrounded on both sides by a wobbled groove. However, the cited text fails to describe what event a jump track is generated in response to.

In fact, other sections of Tomita explain the source of the jump signal. For example, col. 15, lines 62-64 of Tomita describe the track jump command being received from the drive controller 46. A track jump command is generated when "the tracking-servo control is executed to drive the objective lens 220 from the present position by a distance of about 1 track in a direction toward an outer circumference" (col. 24, lines 55-50). Similarly, col. 28, lines 39-42 of Tomita describe how a jump is executed in order to reach an access target to complete an access operation. Consequently, Applicant asserts there is nothing in the cited portions of Tomita that suggest or disclose "generating a jump signal in response to a state of the land/groove signal varying."

Amended claim 1 recites at least the following features:

determining from which track the tracking error signal has been generated using the generated land/groove signal, in response to the determination that the tracking error signal has been generated;

The Office Action mailed April 30, 2007 sets forth on page 2 the following rationale supporting the rejection as applied to the above-recited features:

"[As] shown in column 27, lines 7-19, Tomita teaches determining that when the apparatus is on a non-wobbled groove the address cannot be obtained. Tomita teaches jumping 1 track so this address can be obtained. When the apparatus of Tomita determines it is on a non-wobbled groove track it is determining from which track the tracking error signal is generated."

The Office Action mailed August 9, 2007 further states on page 5:

"[I]n fig. 14D and column 29, lines 38-45, Tomita describes establishing a state of on-track along a land track by using the tracking waveform of fig. 14D. This waveform is a land/groove signal."

Applicant respectfully disagrees with the analysis set forth in the Office Actions.

Referring to the first cited portion of the rejection, assuming for the sake of argument that the cited text describes jumping 1 track in order to obtain an address, the cited portion still fails to suggest or disclose using a generated land/groove signal to obtain the address. In fact, as Applicants have argued above, since Tomita does not describe "generating a land/groove signal to discern land tracks and groove tracks," it cannot suggest or disclose using a generated land/groove signal to obtain the address.

Further, Applicant notes that there is no tracking waveform illustrated in FIG. 14D as asserted in the second cited portion of the rejection. For the sake of argument, Applicant will assume the Office intended to refer to the pull-in signal PI illustrated in FIG. 14F. The PI signal illustrated in FIG. 14F, as described in the cited portions of Tomita, is used to indicate "a total intensity of lights reflected by the disc" (col. 25, lines 1-2). Putting a laser spot SP in a state of on-track along a land, the PI signal reaches a maximum (col. 25, lines 4-5). Conversely, putting the laser spot SP in a state of on-track along a groove results in the PI signal reaching a minimum (col. 25, lines 3-7). On the other hand, obtaining a target value of a 0 level at a position corresponding to a 0-degree or 360-degree phase of a tracking error (TE) signal is referred to as a state of on-track along a groove (col. 25, lines 23-30). FIG. 14E illustrates the TE signal corresponding to the PI signal of FIG. 14F. However, the cited portions of Tomita fail to describe determining from which track the TE signal has been generated using the generated PI signal. In contrast, the TE signal of Tomita is described as continuously tracking the relative movement of the laser spot SP away from or towards the disc center (col. 25, lines 1-40) but Tomita does not describe using the PI signal to perform the tracking.

Further, Tomita does not describe making a "determination that the tracking error signal has been generated" because, in fact, the TE signal described in the cited portions of Tomita is continuously generated "as an operation of the tracking servo control circuit" (col. 25, lines 31-40). Accordingly, because Tomita does not describe the foregoing, Tomita cannot describe all of the above-recited features.

Accordingly, Applicant respectfully submits that independent claim 1 patentably distinguishes over Tomita, and should be allowable for at least the above-mentioned reasons. Since similar features recited by independent claim 11, with potentially differing scope and breadth, are not taught or disclosed by Tomita, the rejection should be withdrawn and claim 11 also allowed. In addition, claims 3-7 which depend from independent claim 1 should be allowable for at least the same reasons as claim 1, as well as for the additional features recited therein.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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